

### **REMARKS/ARGUMENTS**

This is a full and timely response to the non-final Office Action of April 29, 2003. Upon entry of this response, Claims 1-53 remain pending in the application. Applicant notes with appreciation the Examiner's indication that the claims contain patentable subject matter.

#### **Rejection of Claim 41 under 35 U.S.C. §102(b)**

In the Office Action, Claim 41 was rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,111,400 to *Yoder* (hereafter '*Yoder*').

Applicant respectfully traverses this rejection. The Office Action references two passages from the *Yoder* patent which are said to disclose corresponding elements of Claim 41. Applicants have reviewed the cited passages and the *Yoder* patent in general, and, based on this review, respectfully assert that *Yoder* does not anticipate Claim 41 of the present application.

The Office Action states that column 5, lines 30-32 of *Yoder* disclose the concept of comparing a track of a target aircraft with a track of an own ship aircraft. However, applicants respectfully assert that *Yoder* does not teach this concept at column 5, lines 30-32. Rather, the passage from *Yoder* discusses a "dissemination computer" that assimilates traffic and weather information near an air traffic control facility.

Similarly, the Office Action cites column 15, lines 18-21 of *Yoder* as disclosing the concept of displaying a closure indicator on a display screen responsive, at least in part, to the track of a target aircraft being within a predetermined variation of a track of an own ship aircraft. However, this passage from *Yoder* simply mentions that aircraft falling within a two-mile display range of an aircraft's moving map display would be shown on that display. Accordingly, Applicant respectfully submits that this passage does not discuss the track of an own ship aircraft, the track of a target aircraft, or the display of a closure indicator. Accordingly, Applicant requests that the rejection of Claim 41 be withdrawn.

#### **Rejection of Claims 1, 2, 4, 38, 40, and 42 under 35 U.S.C. 102(b)**

Claims 1, 2, 4, 38, 40, and 42 were rejected in the Office Action under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,197,538 to *Stocker* (hereafter '*Stocker*').

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In regard to Claims 1 and 42, the Office Action states that column 4, lines 40-43 of *Stocker* disclose determining whether a target aircraft is within a predetermined monitoring zone and that column 6, lines 44-49 disclose displaying a closure indicator on a display screen responsive, at least in part, to the target aircraft being within the predetermined monitoring zone. Applicant respectfully submits that column 4, lines 40-43, and column 6, lines 44-49 do not disclose these concepts. Rather, column 4, lines 40-43 disclose using a function generator to format data to a graphical form suitable for a pilot use and column 6, lines 44-49 disclose converting altitude and position data into a form readily usable by a pilot. Such data may include, for example, the relative positions of the own ship aircraft and other aircraft. Applicant respectfully submits that these passages do not discuss a pre-determined monitoring zone, or displaying a closure indicator on a display screen responsive, at least in part, to a target aircraft being within a predetermined monitoring zone. Applicant respectfully submits that *Stocker* does not anticipate these claims and respectfully requests that the rejection of these claims be withdrawn.

In rejecting Claims 2, 4, 39, and 40, the Office Action states that elements of these claims are "inherent". Applicant respectfully asserts that Claims 2, 4, 39, and 40 all include elements that are not "inherent" in existing systems. Furthermore, these claims each depend from Claim 1 and as such these claims are allowable for at least this reason. Accordingly, Applicant respectfully requests that the rejections of Claims 2, 4, 39, and 40 be withdrawn.

#### **Response to Rejections under 35 U.S.C. §103(a)**

In the Office Action, Claims 3, 5-10, 13, 17, and 23-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over various combinations of references. Applicant respectfully traverses these rejections.

#### **A Prima Facie Case of Obviousness has Not Been Established**

To establish a prima facie case of obviousness, three basic criteria must be met. These criteria are as follows: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify

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the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §2143.

For the reasons set forth below, applicants respectfully assert that, in this case, the Examiner has failed to present any basis for the existence of elements (1) and (3) listed above.

**No Suggestion or Motivation in the Prior Art Exists for Combining the Cited References**

As indicated by the Federal Circuit, an Examiner can combine references to establish a proper obviousness rejection, but may do so “only by showing some objective teaching [leading to the combination]” *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1998). The teaching or suggestion to make the claimed combination must be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Therefore, combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability. That is the essence of improper hindsight reasoning. See, e.g., *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985). The range of sources available as evidence of motivation can flow from the prior art references themselves, or from one of ordinary skill in the art. The showing of motivation, however, *must be clear and particular*. See, e.g., *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). Thus, broad conclusory statements regarding the teaching of multiple references, standing alone, are not “evidence.” See, e.g., *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993). It is *improper* to base this reasoning, not on the level of ordinary skill in the art at the time the invention was made, but upon *knowledge gleaned from the applicants' disclosure*. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971); MPEP §2145.

Applicants respectfully submit that the Office Action does not provide sufficient bases for the existence of an objective suggestion, teaching, or motivation to make the hypothetical combinations found in the Office Action. The broad conclusory statements presented in the Office Action do not constitute evidence in this regard, and, as such, applicants respectfully

submit that the combinations presented in the Office Action were reached through improper hindsight reasoning. For this reason, applicants respectfully request that the rejections be withdrawn.

**The Prior Art References Do Not Teach All of the Limitations of Applicants' Claims**

Applicants further submit that the Office Action also does not satisfy the third required element of a prima facie case of obviousness. More particularly, the prior art references do not teach all of the limitations of Applicant's Claims.

In the Office Action, Claims 9, 10, 13, 17, 23, 25, and 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Stocker* in view of *Yoder*.

Regarding Claim 9, the Office Action states that *Stocker* does not teach comparing a track of a target aircraft with a track of an own ship aircraft or teach displaying a closure indicator on the display screen responsive, at least in part, to the track of the target aircraft being within a predetermined variation of the track of the own ship aircraft. The Office Action states, however, that these elements are disclosed by *Yoder*. The Office Action then references the same passages of *Yoder* (column 5, lines 30-32 and column 15, lines 18-21) that were discussed above in regard to the rejection of Claim 41. For the reasons set forth above in regard to Claim 41, Applicant respectfully submits that the cited passages do not teach or suggest the concepts of comparing a track of a target aircraft with a track of an own ship aircraft or displaying a closure indicator on a display screen responsive, at least in part, to the track of the target aircraft being within a predetermined variation of the track of the own ship aircraft. Accordingly, applicants respectfully traverse this rejection, and request that the rejection be withdrawn.

Claim 10 depends from Claim 9 and is patentable for at least this reason. Accordingly, applicants respectfully request that the rejection be withdrawn.

Regarding Claims 13 and 17, the Office Action states that *Stocker* does not teach "whether the own ship aircraft is closing in, or receding from the target aircraft." The Office Action states, however, that this element is disclosed by *Yoder* at column 15, lines 18-21. As discussed above in regard to Claim 41, column 15, lines 18-21 of *Yoder* simply mention that aircraft falling within the selected two-mile display range of its moving map display would be

shown on that display. Accordingly, Applicants respectfully submit that this passage does not discuss "whether the own ship aircraft is closing in, or receding from the target aircraft" as stated in the Office Action. As such, Applicants request that the rejection of Claims 13 and 17 be withdrawn.

Regarding Claim 23 and 25, these claims depend from Claim 17 and are patentable for at least this reason. Accordingly, Applicants respectfully request that the rejection of Claims 23 and 25 be withdrawn.

Regarding Claim 26, the Office Action states that *Stocker* does not teach "a symbol representing the own ship aircraft if the own ship aircraft is receding from the target aircraft." The Office Action states, however, that *Yoder* teaches this element in Figs. 10 and 11, which show representative screen displays of the *Yoder* system. Both figures show a moving map on which an own ship aircraft (U443) is displayed. Other aircraft in the vicinity of the own ship aircraft as well as the own ship aircraft are shown in Fig. 11 (114, 115, 116). In Fig. 11, multiple symbols are used to indicate the past locations of the other aircraft.

Applicant respectfully submits that Figs. 10 and 11 of *Yoder* do not disclose various elements of Claim 26. For example, these figures do not disclose a display where a "closing/receding indicia is displayed below a symbol representing said Own Ship aircraft if said Own Ship aircraft is receding from said target aircraft." Accordingly, withdrawal of the rejection of Claim 26 is respectfully requested.

Claims 3 and 8 were rejected in the Office Action under 35 U.S.C. 103(a) as being unpatentable over *Stocker* in view of U.S. Patent No. 5,313,396 to *Terpstra* (hereafter '*Terpstra*'). The Office Action states that *Stocker* does not teach "allowing the user to modify at least one boundary of the predetermined monitoring zone." The Office Action states, however, that *Terpstra* teaches this element at column 13, lines 5-11. Applicants respectfully assert that *Terpstra* does not disclose that which is claimed in Claims 3 and 8 of the present invention.

*Terpstra* discloses an aviation navigational calculator. Such devices are commonly used by pilots in preflight planning activities prior to embarking on a flight under FAA visual flight rule conditions. Such devices are also used to perform in-flight calculations for course corrections and the like. The device disclosed in *Terpstra*, however, has no relation to the in-

flight display of air traffic related information, nor does it have any relation to allowing a user to modify a boundary of a pre-determined monitoring zone. Accordingly, applicants respectfully request that the rejection of Claims 3 and 8 be withdrawn.

Claims 5-7 were rejected in the Office Action under 35 U.S.C. 103(a) as being unpatentable over *Stocker* in view of U.S. Patent No. 5,945,926 to *Ammar*. These claims depend from Claim 1 and are patentable for at least this reason. Applicant respectfully requests that the rejection of Claims 5-7 be withdrawn.

In the Office Action, Claims 23-25 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Stocker* in view of U.S. Patent No. 5,179,377 to *Hancock* (hereafter '*Hancock*'). More particularly, the Office Action states that *Stocker* "does not teach a symbol representing the own ship aircraft if the own ship aircraft is closing in on the target aircraft." The Office Action states, however, that *Hancock* teaches this concept in Fig. 1.

Fig. 1 of *Hancock* discloses a display indicating the positions a number of aircraft in relation to an own ship aircraft. The display indicates the track of the other aircraft by displaying a small aircraft symbol pointing along the track of the other aircraft. Altitude information is displayed as well, including current altitude information, whether the aircraft is ascending or descending, and whether the aircraft is above or below the own ship aircraft. The display disclosed in Fig. 1 of *Hancock* does not disclose displaying "a symbol representing the own ship aircraft if the own ship aircraft is closing in on the target aircraft" as asserted by the Examiner. Accordingly, for this and other reasons, applicants respectfully request that the rejection of Claims 23-25 be withdrawn.

#### **Allowable Subject Matter**

Applicants note with appreciation the Examiner's indication in the Office Action that Claims 44-53 are allowable, and that Claims 11-12, 14-16, 18-22, 27-38, and 43 would be allowable if rewritten in independent form. In light of the remarks above regarding the claims from which Claims 11-12, 14-16, 18-22, 27-38, and 43 depend, Applicant respectfully submits that these claims are patentable in their present form.

**Conclusion**

In view of the remarks presented above, it is respectfully submitted that Claims 1-53 of the application are in condition for allowance. It is therefore respectfully requested that a Notice of Allowance be issued.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

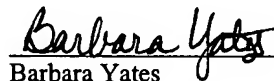


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